

Dog bites

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1 The cornerstone of treatment for dog bites is meticulous wound care

Optimal treatment of dog bites starts with generous irrigation of the wound with saline solution and debridement, including removal of foreign bodies and devitalized tissue.^{1,2} If there is any suspicion of infection, cultures of blood and purulent fluid should be obtained, as cultures only of the wound may be contaminated by skin flora.

2 Most dog bite wounds should be allowed to heal by secondary intention

Wounds should be reevaluated after 48 hours.² When clinically appropriate (e.g., wound is on the hand or has large, gaping edges), wound edges may be approximated using suture tape or nylon sutures, as these are easily removable if signs of infection appear later in the evolution of the wound.

3 Dog bites on the face or genitals should be closed by primary intention

Patients with wounds in high-risk locations, such as face or genitals, or that need extensive debridement should be referred for surgical consultation.² Radiography is recommended for wounds near joints.²

4 Antibiotic prophylaxis and treatment should be considered following specific criteria

Even in the absence of signs of infection, empiric antibiotic prophylaxis should be started orally for deep and puncture wounds, crush injuries, bites that caused vascular compromise, bites near joints, bites on the face or genitals, if there is a delay in medical consultation (more than eight hours after injury) or for wounds that have been closed by primary intention, except for clean, superficial wounds.³ If there are signs of infection, intravenous treatment should be considered. The choice of antibiotic regimen should reflect potential contamination from dog saliva, notably *Pasteurella canis* (Box 1 in Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.170684/-/DC1).

5 Postexposure prophylaxis for rabies and tetanus should be considered

If the patient has received fewer than three doses of tetanus vaccine or the patient's vaccine status is unknown, tetanus immunoglobulins and one vaccine dose should be administered. If the biting animal presents any abnormal behaviour, such as hypersalivation, seizures, paralysis and irritability, rabies immunoglobulins should be administered to the patient, as well as rabies vaccine doses on days 0, 3, 7 and 14 postexposure. If the patient was previously vaccinated (i.e., 3 doses with a last dose ≤ 5 yr), vaccine doses on days 0 and 3 are sufficient.⁴

References

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